### FCC TEST REPORT and IC TEST REPORT

For

LE910-NAG

**Model: LE910-NAG** 

**Trade Name: Telit** 

Issued to

Telit Communications S.p.A. Via Stazione di Prosecco 5/B 34010 Sgonico, Trieste - Italy

Issued by

Compliance Certification Services Inc.
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# **Revision History**

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	June 4, 2015	Initial Issue	ALL	Doris Chu

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Reference No: T140415W02-RP2

Report No.: T150528W04-RP2

# Compliance Certification Services Inc. FCC ID: RI7LE910NA IC ID: 5131A-LE91 IC ID: 5131A-LE910NA

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# 1. TEST RESULT CERTIFICATION

**Applicant:** Telit Communications S.p.A.

Via Stazione di Prosecco 5/B

34010 Sgonico, Trieste - Italy

**Manufacturer:** Telit Communications S.p.A.

> Via Stazione di Prosecco 5/B 34010 Sgonico, Trieste - Italy

**Equipment Under Test:** LE910-NAG

**Trade Name:** Telit

**Model:** LE910-NAG **Date of Test:** May 31, 2015

FCC PART 27, SUBPART C, L, FCC PART 2					
OPERATING BAND: 704 - 716 MHZ					
STANDARD	TEST TYPE AND LIMIT				
2.1046 27.50(B)(10) & RSS-130 Issue 1 October 2013 4.4	Maximum Peak Output Power Limit: max. 3 watts e.r.p peak power				
2.1055 27.54 & RSS-130 Issue 1 October 2013 4.3	Frequency Stability				
2.1049 27.53(g) & RSS-130 Issue 1 October 2013 4.3	Occupied Bandwidth				
27.50(d)(5)	Peak to average ratio				
27.53(g)	Band Edge Measurements				
2.1051 27.53(g) & RSS-130 Issue 1 October 2013 4.6	Conducted Spurious Emissions				
2.1053 27.53(g) & RSS-130 Issue 1 October 2013 4.6	Radiated Spurious Emissions				

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OPERATING BAND: 1710~1755 MHZ				
Standard	TEST TYPE AND LIMIT			
2.1046 27.50(d)(4) & RSS-139 Issue 2 February 2009 6.4	Maximum Peak Output Power Limit: max. 1 watts e.i.r.p peak power max. 5 watts for Band 17			
2.1055 27.54 & RSS-139 Issue 2 February 2009 6.3	Frequency Stability			
2.1049 27.53(h) & RSS-139 Issue 2 February 2009 2.3	Occupied Bandwidth			
27.50(d)(5) & RSS-139 Issue 2 February 2009 6.4	Peak to average ratio			
27.53(h)	Band Edge Measurements			
2.1051 27.53(h) & RSS-139 Issue 2 February 2009 6.5	Conducted Spurious Emissions			
2.1053 27.53(h) & RSS-139 Issue 2 February 2009 6.5 6.6	Radiated Spurious Emissions			

Note: 1. The test result judgment is decided by the limit of test standard

2. The information of measurement uncertainty is available upon the customer's request.

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#### **Deviation from Applicable Standard**

None

The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by

Reviewed by

Miller Lee Manager

Compliance Certification Services Inc.

Willer Lee

Angel Cheng Section Manager

Compliance Certification Services Inc.

Angel Chenf

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# 2. EUT DESCRIPTION

Product	LE910-NAG					
Model Number	LE910-NAG					
Model Discrepancy	N/A					
Trade	Telit	Telit				
Received Date	May 28, 2015					
Power Supply	DC 3.8V powered from Host device	e.				
	LTE Band 4	QPSK, 16QAM				
Modulation Technology	LTE Band 17	QPSK, 16QAM				
	LTE Band 4 Channel Bandwidth: 5MHz	1712.5MHz ~1752.5MHz				
	LTE Band 4 Channel Bandwidth: 10MHz	1715.0MHz ~1750.0MHz				
Frequency Range	LTE Band 4 Channel Bandwidth: 20MHz	1720MHz ~1745MHz				
	LTE Band 17 Channel Bandwidth: 5MHz	706.5MHz ~ 713.5MHz				
	LTE Band 17 Channel Bandwidth: 10MHz	709MHz ~ 711MHz				
	LTE Band 4 Channel Bandwidth: 5MHz	QPSK: 17.81dBm 16QAM: 17.91dBm				
	LTE Band 4 Channel Bandwidth: 10MHz	QPSK: 16.06dBm 16QAM: 16.73dBm				
Maximum EIRP Power	LTE Band 4 Channel Bandwidth: 20MHz	QPSK: 15.90dBm 16QAM: 16.00dBm				
	LTE Band 17 Channel Bandwidth: 5MHz	QPSK: 24.44dBm 16QAM: 20.77dBm				
	LTE Band 17 Channel Bandwidth: 10MHz	QPSK: 19.98dBm 16QAM: 19.00dBm				
Category	9					
Antenna Specification	1/4l Antenna / Gain: 2.14 dBi					

**Note:** 1. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

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# 3. TEST METHODOLOGY

## 3.1 DESCRIPTION OF TEST TYPE

The EUT (model: LE910-NAG) had been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting mode was programmed.

Reference No: T140415W02-RP2

Report No.: T150528W04-RP2

#### LTE Band 4: 1710MHz ~ 1755MHz

Three channels had been tested for each channel bandwidth.

Channel	5MHz		10MHz		20MHz	
Channel Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low channel (L)	19975	1712.5	20000	1715.0	20050	1720.00
Middle channel (M)	20175	1732.5	20175	1732.5	20175	1732.50
High channel (H)	20375	1752.5	20350	1750.0	20300	1745.00

#### LTE Band 17: 2500 MHz ~ 2570 MHz

### Three channels had been tested for each channel bandwidth.

Channel	5M	IHz	10MHz		
Bandwidth	Channel	Frequency(MHz)	Channel	Frequency(MHz)	
Low channel (L)	23755	706.5	23780	709.0	
Middle channel (M)	23790	710.0	23790	710.0	
High channel (H)	23825	713.5	23800	711.0	

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# 4. INSTRUMENT CALIBRATION

## 4.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

Reference No: T140415W02-RP2

Report No.: T150528W04-RP2

# 4.2 MEASUREMENT EQUIPMENT USED

## **Equipment Used for Emissions Measurement**

**Remark:** Each piece of equipment is scheduled for calibration once a year.

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4407B	MY44212686	03/17/2016
Pre-Amplifier	MITEQ	AFS44-00102650-42-10P-44	1042473	04/13/2016
Bilog Antenna	Sunol Sciences	JB3	A030205	08/18/2015
Turn Table	CCS	CC-T-1F	N/A	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R
Spectrum Analyzer	ROHDE&SCHWARZ	FSV40	101073	07/09/2015
Horn Antenna	EMCO	3117	00055165	01/26/2016
Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW 500	116875	04/13/2016

## **4.3MEASUREMENT UNCERTAINTY**

PARAMETER	UNCERTAINTY
3M Semi Anechoic Chamber / 30M~200M	+/- 4.0138
3M Semi Anechoic Chamber / 200M~1000M	+/- 3.9483
3M Semi Anechoic Chamber / 1G~8G	+/- 2.5975
3M Semi Anechoic Chamber / 8G~18G	+/- 2.6112
3M Semi Anechoic Chamber / 18G~26G	+/- 2.7389
3M Semi Anechoic Chamber / 26G~40G	+/- 2.9683

**Remark**: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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# 5. FACILITIES AND ACCREDITATIONS

### **5.1 FACILITIES**

All measurement facilities used to collect the measurement data are local and the second of the seco	cated at
No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.	O.C.
Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029	
No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiv	van. (R.O.C.)
Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045	
No.81-1, Lane 210, Bade 2nd Rd., Luchu Hsiang, Taoyuan Hsien	338, Taiwan
Tel: 886-3-324-0332 / Fax: 886-3-324-5235	
The sites are constructed in conformance with the requirements of AN 2013 and CISPR Publication 22.	SI C63.7, ANSI C63.10:

## **5.2 EQUIPMENT**

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, ridged waveguide, horn and/or Loop. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

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# 5.3 TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3M Semi Anechoic Chamber (FCC MRA: TW1039) to perform FCC Part 15 measurements	FCC MRA: TW1039
Taiwan	TAF	LP0002, RTTE01, FCC Method-47 CFR Part 15 Subpart C, D, E, RSS-210, RSS-310 IDA TS SRD, AS/NZS 4268, AS/NZS 4771, TS 12.1 & 12.2, ETSI EN 300 440-1, ETSI EN 300 440-2, ETSI EN 300 328, ETSI EN 300 220-1, ETSI EN 300 220-2, ETSI EN 301 893, ETSI EN 301 489-1/3/7/17 FCC OET Bulletin 65 + Supplement C, EN 50360, EN 50361, EN 50371, RSS 102, EN 50383, EN 50385, EN 50392, IEC 62209, CNS 14958-1, CNS 14959 FCC Method –47 CFR Part 15 Subpart B IEC / EN 61000-3-2, IEC / EN 61000-3-3, IEC / EN 61000-4-2/3/4/5/6/8/11	Testing Laboratory 1309
Canada	Industry Canada	3M Semi Anechoic Chamber (IC 2324G-1 / IC 2324G-2) to perform	Canada IC 2324G-1 IC 2324G-2

<sup>\*</sup> No part of this report may be used to claim or imply product endorsement by A2LA or any agency of the US Government.

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# 6. SETUP OF EQUIPMENT UNDER TEST

## **6.1 SETUP CONFIGURATION OF EUT**

See test photographs attached in Appendix I for the actual connections between EUT and support equipment.

Reference No: T140415W02-RP2

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# **6.2 SUPPORT EQUIPMENT**

No.	Device Type	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
	N/A						

#### Remark:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

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### 7. TEST PROCEDURE AND RESULT

#### 7.1 OUTPUT POWER MEASUREMENT

## **LIMITS**

Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz

band are limited to 1 watt EIRP.

Portable stations (hand-held devices) operating in the 698–746 MHz band are limited

to 3 watts ERP

Operating in the Frequency

Bands 698-756 MHz shall not exceed 5 watts for portable equipment or for indoor fixed subscriber equipment

#### **TEST PROCEDURES**

#### **EIRP / ERP MEASUREMENT:**

- 1. The EUT was set up for the maximum power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range). RWB and VBW is 10MHz for LTE.
- 2. E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- 3. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G d. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn
- 4. E.R.P = E.I.R.P 2.15 dB

#### CONDUCTED POWER MEASUREMENT:

- 1. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
- 2. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

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# **TEST RESULTS**

# LTE Band 17

**Channel Bandwidth: 5MHz** 

Chamier Bana widom Civilia			
Conducted Output Power (QPSK 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency Output Power			
(MHz)	Channel	(dBm)	(W)
706.5	23755	22.62	0.18281
710.0	23790	22.15	0.16406
713.5	23825	22.60	0.18197

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE UPPER EDGE)					
Frequency	Output Power			GI I	Power
(MHz)		(dBm)	(W)		
706.5	23755	22.21	0.16634		
710.0	23790	22.58	0.18113		
713.5	23825	22.02	0.15922		

Conducted Output Power (QPSK 50% RB ALLOCATION CENTERED)				
Frequency	Output Power		CI I	Power
(MHz)	Channel	(dBm)	(W)	
706.5	23755	21.61	0.14488	
710.0	23790	21.54	0.14256	
713.5	23825	21.28	0.13428	

Conducted Output Power (QPSK 100% RB ALLOCATION)			
Frequency Channel Output Power			Power
(MHz)	Channel	(dBm)	(W)
706.5	23755	21.62	0.14521
710.0	23790	21.43	0.13900
713.5	23825	21.60	0.14454

#### Remarks:

- 1. Output Power  $(dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
- 3. The value in bold is the worst.

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Reference No: T140415W02-RP2

Report No.: T150528W04-RP2

FCC ID: RI7LE910NA IC ID: 5131A-LE910NA

## **Channel Bandwidth: 5MHz**

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency	Output P		Power
(MHz)	Channel	(dBm)	(W)
706.5	23755	22.10	0.16218
710.0	23790	21.88	0.15417
713.5	23825	22.09	0.16181

Reference No: T140415W02-RP2

Report No.: T150528W04-RP2

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE UPPER EDGE)				
Frequency	Output Power		CI. I	Power
(MHz)	Channel	(dBm)	(W)	
706.5	23755	21.85	0.15311	
710.0	23790	22.11	0.16255	
713.5	23825	21.92	0.15560	

Conducted Output Power (16QAM 50% RB ALLOCATION CENTERED)				
Frequency	Output Power		Charmal.	Power
(MHz)	Channel	(dBm)	(W)	
706.5	23755	21.46	0.13996	
710.0	23790	22.05	0.16032	
713.5	23825	21.54	0.14256	

Conducted Output Power (16QAM 100% RB ALLOCATION)				
Frequency	Output Power		Channel	Power
(MHz)	Channel	(dBm)	(W)	
706.5	23755	21.42	0.13868	
710.0	23790	21.43	0.13900	
713.5	23825	21.57	0.14355	

#### Remarks:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
- 3. The value in bold is the worst.

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## LTE Band 17

# **Channel Bandwidth: 10MHz**

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE LOWER EDGE)					
Frequency	Output Power			CI. I	Power
(MHz)	Channel	(dBm)	(W)		
709.0	23780	22.71	0.18664		
710.0	23790	22.61	0.18239		
711.0	23800	22.43	0.17498		

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE UPPER EDGE)				
Frequency	Output Power		CI I	Power
(MHz)	Channel	(dBm)	(W)	
709.0	23780	22.59	0.18155	
710.0	23790	22.68	0.18535	
711.0	23800	22.45	0.17579	

Conducted Output Power (QPSK 50% RB ALLOCATION CENTERED)				
Frequency	Output Power		CI. I	Power
(MHz)	Channel	(dBm)	(W)	
709.0	23780	21.64	0.14588	
710.0	23790	21.59	0.14421	
711.0	23800	21.67	0.14689	

Conducted Output Power (QPSK 100% RB ALLOCATION)			
Frequency	Frequency Output Power		
(MHz)	Channel	(dBm)	(W)
709.0	23780	21.53	0.14223
710.0	23790	21.79	0.15101
711.0	23800	21.82	0.15205

#### Remarks:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2.  $Correction\ Factor\ (dB) = Power\ Splitter\ Loss\ (dB) + Cable\ Loss\ (dB) + 20dB\ Attenuator.$
- 3. The value in bold is the worst.

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**Channel Bandwidth: 10MHz** 

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency	Frequency		Power
(MHz)	Channel	(dBm)	(W)
709.0	23780	22.34	0.17140
710.0	23790	21.98	0.15776
711.0	23800	22.26	0.16827

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency	Channel	Output	t Power
(MHz)	Channel	(dBm)	(W)
709.0	23780	22.32	0.17061
710.0	23790	22.25	0.16788
711.0	23800	21.83	0.15241

Conducted Output Power (16QAM 50% RB ALLOCATION CENTERED)			
Frequency	Channal	Output	Power
(MHz)	Channel	(dBm)	(W)
709.0	23780	22.28	0.16904
710.0	23790	22.31	0.17022
711.0	23800	22.28	0.16904

Conducted Output Power (16QAM 100% RB ALLOCATION)			
Frequency	Frequency		Power
(MHz)	Channel	(dBm)	(W)
709.0	23780	21.37	0.13709
710.0	23790	21.40	0.13804
711.0	23800	21.51	0.14158

### Remarks:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
- 3. The value in bold is the worst.

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## LTE Band 4

# **Channel Bandwidth: 5MHz**

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency	Frequency Output Power		
(MHz)	Channel	(dBm)	(W)
1712.5	19975	22.15	0.16406
1732.5	20175	22.06	0.16069
1752.5	20375	22.07	0.16106

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Conducted Output Power (QPSK 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency	Channel	Output	Power
(MHz)	Channel	(dBm)	(W)
1712.5	19975	22.15	0.16406
1732.5	20175	22.27	0.16866
1752.5	20375	22.34	0.17140

Conducted Output Power (QPSK 50% RB ALLOCATION CENTERED)			
Frequency	Channal	Output	Power
(MHz)	Channel	(dBm)	(W)
1712.5	19975	21.93	0.15596
1732.5	20175	21.86	0.15346
1752.5	20375	22.21	0.16634

Conducted Output Power (QPSK 100% RB ALLOCATION)			
Frequency Channel Output Power			Power
(MHz)	Channel	(dBm)	(W)
1712.5	19975	21.63	0.14555
1732.5	20175	21.70	0.14791
1752.5	20375	21.66	0.14655

#### Remarks:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2.  $Correction\ Factor\ (dB) = Power\ Splitter\ Loss\ (dB) + Cable\ Loss\ (dB) + 20dB\ Attenuator.$
- 3. The value in bold is the worst.

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**Channel Bandwidth: 5MHz** 

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency	Channel	Output	Power
(MHz)	Channel	(dBm)	(W)
1712.5	19975	22.23	0.16711
1732.5	20175	22.36	0.17219
1752.5	20375	22.30	0.16982

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency	Channal	Output	Power
(MHz)		(dBm)	(W)
1712.5	19975	22.09	0.16181
1732.5	20175	22.51	0.17824
1752.5	20375	22.17	0.16482

Conducted Output Power (16QAM 50% RB ALLOCATION CENTERED)			
Frequency	Channel	Output	Power
(MHz)	Channer	(dBm)	(W)
1712.5	19975	21.69	0.14757
1732.5	20175	21.79	0.15101
1752.5	20375	22.19	0.16558

Conducted Output Power (16QAM 100% RB ALLOCATION)			
Frequency	Frequency		Power
(MHz)	Channel	(dBm)	(W)
1712.5	19975	21.70	0.14791
1732.5	20175	21.83	0.15241
1752.5	20375	22.05	0.16032

#### Remarks:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
- 3. The value in bold is the worst.

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 Ces Inc.
 Reference No: T140415W02-RP2

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## LTE Band 4

# **Channel Bandwidth: 10MHz**

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency	Frequency Output Power		
(MHz)	Channel	(dBm)	(W)
1715.0	20000	22.17	0.16482
1732.5	20175	22.31	0.17022
1750.0	20350	22.40	0.17378

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency Channel Output Power		Power	
(MHz)	Channel	(dBm)	(W)
1715.0	20000	22.46	0.17620
1732.5	20175	22.51	0.17824
1750.0	20350	22.36	0.17219

Conducted Output Power (QPSK 50% RB ALLOCATION CENTERED)					
Frequency	Output Power			CI I	Power
(MHz)	Channel	(dBm)	(W)		
1715.0	20000	21.02	0.12647		
1732.5	20175	21.57	0.14355		
1750.0	20350	21.54	0.14256		

Conducted Output Power (QPSK 100% RB ALLOCATION)			
Frequency Channel Output Power			Power
(MHz)	Channel	(dBm)	(W)
1715.0	20000	21.53	0.14223
1732.5	20175	21.49	0.14093
1750.0	20350	21.52	0.14191

#### Remarks:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2.  $Correction\ Factor\ (dB) = Power\ Splitter\ Loss\ (dB) + Cable\ Loss\ (dB) + 20dB\ Attenuator.$
- 3. The value in bold is the worst.

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IC ID: 5131A-LE910NA

Reference No: T140415W02-RP2

Report No.: T150528W04-RP2

**Channel Bandwidth: 10MHz** 

Conducted Output Power (16QAM RB ALLOCATED AT THE LOWER EDGE)			
Frequency	equency Output Power		Power
(MHz)	Channel	(dBm)	(W)
1715.0	20000	22.38	0.17298
1732.5	20175	22.03	0.15959
1750.0	20350	22.47	0.17660

Conducted Output Power (16QAM RB ALLOCATED AT THE UPPER EDGE)			
Frequency Channel Output Power			Power
(MHz)	Channel	(dBm)	(W)
1715.0	20000	22.18	0.16520
1732.5	20175	22.40	0.17378
1750.0	20350	22.34	0.17140

Conducted Output Power (16QAM 50% RB ALLOCATION CENTERED)				
Frequency	Channel	Output	Output Power	
(MHz)	Channer	(dBm)	(W)	
1715.0	20000	21.74	0.14928	
1732.5	20175	22.11	0.16255	
1750.0	20350	22.02	0.15922	

Conducted Output Power (16QAM 100% RB ALLOCATION)			
Frequency	Channal	Output	Power
(MHz)	Channel	(dBm)	(W)
1715.0	20000	21.24	0.13305
1732.5	20175	22.12	0.16293
1750.0	20350	22.01	0.15885

### Remarks:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
- 3. The value in bold is the worst.

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## LTE Band 4

# **Channel Bandwidth: 20MHz**

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE LOWER EDGE)			
Frequency Channel Output Power			Power
(MHz)	Channel	(dBm)	(W)
1720.00	20050	22.56	0.18030
1732.50	20175	22.42	0.17458
1745.00	20300	22.57	0.18072

Conducted Output Power (QPSK 1 RB ALLOCATED AT THE UPPER EDGE)			
Frequency Output Pow		Power	
(MHz)	Channel	(dBm)	(W)
1720.00	20050	22.52	0.17865
1732.50	20175	22.12	0.16293
1745.00	20300	22.43	0.17498

Conducted Output Power (QPSK 50% RB ALLOCATION CENTERED)			
Frequency	Output Pow		Power
(MHz)	Channel	(dBm)	(W)
1720.00	20050	21.80	0.15136
1732.50	20175	21.63	0.14555
1745.00	20300	21.88	0.15417

Conducted Output Power (QPSK 100% RB ALLOCATION)			
Frequency Channel Output Power			Power
(MHz)	Channel	(dBm)	(W)
1720.00	20050	21.59	0.14421
1732.50	20175	21.85	0.15311
1745.00	20300	21.78	0.15066

#### Remarks:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2.  $Correction\ Factor\ (dB) = Power\ Splitter\ Loss\ (dB) + Cable\ Loss\ (dB) + 20dB\ Attenuator.$
- 3. The value in bold is the worst.

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IC ID: 5131A-LE910NA

Reference No: T140415W02-RP2

Report No.: T150528W04-RP2

**Channel Bandwidth: 20MHz** 

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE LOWER EDGE)							
Frequency	Channel	Output Power					
(MHz)	Channel	(dBm)	(W)				
1720.00	20050	22.49	0.17742				
1732.50	20175	22.41	0.17418				
1745.00	20300	22.60	0.18197				

Conducted Output Power (16QAM 1 RB ALLOCATED AT THE UPPER EDGE)								
Frequency	Channel	Output Power						
(MHz)	Channel	(dBm)	(W)					
1720.00	20050	22.73	0.18750					
1732.50	20175	22.10	0.16218					
1745.00	20300	22.72	0.18707					

Conducted Output Power (16QAM 50% RB ALLOCATION CENTERED)								
Frequency	Channel	Output Power						
(MHz)	Channer	(dBm)	( <b>W</b> )					
1720.00	20050	22.09	0.16181					
1732.50	20175	22.03	0.15959					
1745.00	20300	21.78	0.15066					

Conducted Output Power (16QAM 100% RB ALLOCATION)								
Frequency	Channel	Output Power						
(MHz)	Channel	(dBm)	(W)					
1720.00	20050	21.89	0.15453					
1732.50	20175	21.65	0.14622					
1745.00	20300	21.70	0.14791					

#### Remarks:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2. Correction Factor (dB) = Power Splitter Loss (dB) + Cable Loss (dB) + 20dB Attenuator.
- 3. The value in bold is the worst.

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# **EIRP POWER**

# LTE Band 17

# Channel Bandwidth: 5MHz / QPSK

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
23755	704.3000	V	21.22	3.13	6.35	*24.44	38.45	-14.01
23733	704.0000	Н	16.11	3.12	6.35	19.34	38.45	-19.11
22700	707.6000	V	18.4	3.14	6.31	21.57	38.45	-16.88
23790	707.7500	Н	14.18	3.14	6.31	17.35	38.45	-21.10
23825	711.6500	V	19.03	3.15	6.34	22.22	38.45	-16.23
	711.2000	Н	14.99	3.15	6.34	18.18	38.45	-20.27

# Channel Bandwidth: 5MHz / 16QAM

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
22755	707.9000	V	16.37	3.14	6.31	19.54	38.45	-18.91
23755	706.5500	Н	11.87	3.13	6.33	15.07	38.45	-23.38
22700	711.3500	V	16.2	3.15	6.34	19.39	38.45	-19.06
23790	709.8500	Н	11.68	3.14	6.31	14.85	38.45	-23.60
23825	712.1000	V	17.57	3.15	6.35	*20.77	38.45	-17.68
	712.1000	Н	12.67	3.15	6.35	15.87	38.45	-22.58

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# Channel Bandwidth: 10 MHz / QPSK

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
22790	711.5000	V	14.74	3.15	6.34	17.93	38.45	-20.52
23780	711.3500	Н	10.2	3.15	6.34	13.39	38.45	-25.06
22700	710.0000	V	14.82	3.14	6.32	18.00	38.45	-20.45
23790	710.0000	Н	10.36	3.14	6.32	13.54	38.45	-24.91
22000	710.7500	V	16.79	3.14	6.33	*19.98	38.45	-18.47
23800	710.1500	Н	12.41	3.14	6.32	15.59	38.45	-22.86

# Channel Bandwidth: 10MHz / 16QAM

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
23780	711.3500	V	15.08	3.15	6.34	18.27	38.45	-20.18
23780	710.7500	Н	10.64	3.14	6.33	13.83	38.45	-24.62
22700	709.8500	V	15.83	3.14	6.31	*19.00	38.45	-19.45
23790 709.85	709.8500	Н	11.23	3.14	6.31	14.40	38.45	-24.05
23800	710.7500	V	15.48	3.14	6.33	18.67	38.45	-19.78
	710.7500	Н	10.86	3.14	6.33	14.05	38.45	-24.40

#### Remark:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2. Correction Factor (dB) = S.G Level + Gain of Substitution horn + TX cable loss.
- 3. The value in bold is the worst.

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# LTE Band 4

# Channel Bandwidth: 5MHz / QPSK

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
10075	1714.300	V	15.1	5.14	5.91	15.87	33.00	-17.13
19975	1713.600	Н	14.01	5.13	5.92	14.80	33.00	-18.20
20175	1730.800	V	15.47	5.17	5.88	16.18	33.00	-16.82
20175	1731.400	Н	14.31	5.17	5.88	15.02	33.00	-17.98
20275	1750.900	V	17.16	5.2	5.85	*17.81	33.00	-15.19
20375	1751.900	Н	15.77	5.2	5.85	16.42	33.00	-16.58

# Channel Bandwidth: 5MHz / 16QAM

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
10075	1712.700	V	15.9	5.13	5.92	16.69	33.00	-16.31
19975	1712.300	Н	14.41	5.13	5.92	15.20	33.00	-17.80
20175	1731.100	V	15.51	5.17	5.88	16.22	33.00	-16.78
20175	1731.100	Н	14.73	5.17	5.88	15.44	33.00	-17.56
	1751.900	V	17.26	5.2	5.85	*17.91	33.00	-15.09
20375	1751.600	Н	16.46	5.2	5.85	17.11	33.00	-15.89

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# Channel Bandwidth: 10 MHz / QPSK

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
20000	1718.200	V	13.58	5.14	5.91	14.35	33.00	-18.65
20000	1717.500	Н	12.33	5.14	5.91	13.10	33.00	-19.90
20175	1729.700	V	14.41	5.16	5.89	15.14	33.00	-17.86
20175	1729.300	Н	13.34	5.16	5.89	14.07	33.00	-18.93
20350	1752.500	V	15.41	5.2	5.85	*16.06	33.00	-16.94
	1753.100	Н	14.67	5.21	5.84	15.30	33.00	-17.70

# Channel Bandwidth: 10MHz / 16QAM

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
20000	1717.600	V	13.91	5.14	5.91	14.68	33.00	-18.32
20000	1715.400	Н	12.81	5.14	5.91	13.58	33.00	-19.42
20175	1730.400	V	14.74	5.16	5.89	15.47	33.00	-17.53
20175	1732.200	Н	13.64	5.17	5.88	14.35	33.00	-18.65
20250	1752.700	V	16.08	5.2	5.85	*16.73	33.00	-16.27
20350	1749.800	Н	15.1	5.2	5.85	15.75	33.00	-17.25

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# Channel Bandwidth: 20MHz / QPSK

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
20050	1727.600	V	13.1	5.16	5.89	13.83	33.00	-19.17
20050	1726.500	Н	12.29	5.16	5.89	13.02	33.00	-19.98
20175	1728.100	V	14.06	5.16	5.89	14.79	33.00	-18.21
20175	1728.100	Н	12.84	5.16	5.89	13.57	33.00	-19.43
20200	1752.000	V	15.25	5.2	5.85	*15.90	33.00	-17.10
20300	1749.700	Н	13.67	5.2	5.85	14.32	33.00	-18.68

# Channel Bandwidth: 20MHz / 16QAM

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
20050	1726.100	V	13.38	5.16	5.89	14.11	33.00	-18.89
20050	1724.400	Н	12.52	5.15	5.9	13.27	33.00	-19.73
20175	1728.100	V	14.35	5.16	5.89	15.08	33.00	-17.92
20175	1728.400	Н	13.21	5.16	5.89	13.94	33.00	-19.06
20200	1750.900	V	15.35	5.2	5.85	*16.00	33.00	-17.00
20300	1749.200	Н	14.42	5.2	5.85	15.07	33.00	-17.93

### Remark:

- 1.  $Output\ Power\ (dBm) = Raw\ Value\ (dBm) + Correction\ Factor\ (dB)$ .
- 2.  $Correction\ Factor\ (dB) = S.G\ Level + Gain\ of\ Substitution\ horn\ +\ TX\ cable\ loss.$
- 3. The value in bold is the worst.

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#### 7.2RADIATED EMISSION MEASUREMENT

# **LIMITS**

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log 10$ (P) dB. The limit of emission equal to -13dBm

So the limit of emission is the same absolute specified line.

Limits	EQUIVALENT FIELD STRENGTH AT 3m (dBuV/m) (NOTE)
-13	82.22

Reference No: T140415W02-RP2

Report No.: T150528W04-RP2

**NOTE:** The following formula is used to convert the equipment radiated power to field strength.

 $E = [1000000\sqrt{(30P)}] / 3 \text{ uV/m}$ , where P is Watts

## **TEST PROCEDURES**

- 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2. The EUT was set 3 meters away from the receiving antenna, which was mounted on antenna tower and its position at 0.8 m above the ground.
- 3. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading and recorded the value.
- 4. Repeat step  $1 \sim 3$  for horizontal polarization.

NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

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## **TEST RESULTS**

### **Below 1GHz**

# LTE Band 17 / CHANNEL BANDWIDTH: 5MHz / QPSK

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-64.18	0.79	-5.83	-70.80	-13.00	-57.80	V
138.6400	-62.11	1.39	-0.38	-63.88	-13.00	-50.88	V
186.1700	-83.35	1.62	3.85	-81.12	-13.00	-68.12	V
342.3400	-81.36	2.18	5.8	-77.74	-13.00	-64.74	V
448.0700	-84.37	2.58	5.74	-81.21	-13.00	-68.21	V
612.9700	-83.6	2.94	6.23	-80.31	-13.00	-67.31	V
191.9900	-78	1.62	3.79	-75.83	-13.00	-62.83	Н
342.3400	-76.65	2.18	5.8	-73.03	-13.00	-60.03	Н
390.8400	-78.82	2.32	6	-75.14	-13.00	-62.14	Н
486.8700	-80.87	2.66	5.69	-77.84	-13.00	-64.84	Н
550.8900	-80.18	2.81	6.17	-76.82	-13.00	-63.82	Н
622.6700	-79.45	2.95	6.14	-76.26	-13.00	-63.26	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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 Pervices Inc.
 Reference No: T140415W02-RP2

 IC ID: 5131A-LE910NA
 Report No.: T150528W04-RP2

**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-62.95	0.79	-5.83	-69.57	-13.00	-56.57	V
138.6400	-62.1	1.39	-0.38	-63.87	-13.00	-50.87	V
180.3500	-82.12	1.61	3.62	-80.11	-13.00	-67.11	V
342.3400	-81.84	2.18	5.8	-78.22	-13.00	-65.22	V
450.9800	-83.6	2.59	5.74	-80.45	-13.00	-67.45	V
561.5600	-83.62	2.85	6	-80.47	-13.00	-67.47	V
78.5000	-70.41	1.03	-0.43	-71.87	-13.00	-58.87	Н
138.6400	-58	1.39	-0.38	-59.77	-13.00	-46.77	Н
171.6200	-75.65	1.57	2.69	-74.53	-13.00	-61.53	Н
330.7000	-80.89	2.16	5.71	-77.34	-13.00	-64.34	Н
390.8400	-79.17	2.32	6	-75.49	-13.00	-62.49	Н
561.5600	-80.2	2.85	6	-77.05	-13.00	-64.05	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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 Pervices Inc.
 Reference No: T140415W02-RP2

 IC ID: 5131A-LE910NA
 Report No.: T150528W04-RP2

**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-59.77	0.79	-5.83	-66.39	-13.00	-53.39	V
138.6400	-61.47	1.39	-0.38	-63.24	-13.00	-50.24	V
222.0600	-82.73	1.77	5.34	-79.16	-13.00	-66.16	V
345.2500	-81.23	2.2	5.8	-77.63	-13.00	-64.63	V
448.0700	-79.57	2.58	5.74	-76.41	-13.00	-63.41	V
529.5500	-81.41	2.75	6	-78.16	-13.00	-65.16	V
71.7100	-69.55	0.97	-1.61	-72.13	-13.00	-59.13	Н
138.6400	-57.97	1.39	-0.38	-59.74	-13.00	-46.74	Н
222.0600	-82.51	1.77	5.34	-78.94	-13.00	-65.94	Н
342.3400	-77.51	2.18	5.8	-73.89	-13.00	-60.89	Н
379.2000	-80.13	2.31	5.98	-76.46	-13.00	-63.46	Н
551.8600	-80.38	2.81	6.16	-77.03	-13.00	-64.03	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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## LTE Band 17 / CHANNEL BANDWIDTH: 5MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-64.09	1.16	-0.64	-65.89	-13.00	-52.89	V
138.6400	-61.87	1.39	-0.38	-63.64	-13.00	-50.64	V
342.3400	-81.39	2.18	5.8	-77.77	-13.00	-64.77	V
450.9800	-80.83	2.59	5.74	-77.68	-13.00	-64.68	V
516.9400	-80.8	2.7	6.07	-77.43	-13.00	-64.43	V
565.4400	-81.78	2.86	6.04	-78.60	-13.00	-65.60	V
78.5000	-57.74	1.03	-0.43	-59.20	-13.00	-46.20	Н
138.6400	-57.48	1.39	-0.38	-59.25	-13.00	-46.25	Н
222.0600	-79.15	1.77	5.34	-75.58	-13.00	-62.58	Н
342.3400	-73.61	2.18	5.8	-69.99	-13.00	-56.99	Н
499.4800	-76.49	2.7	5.89	-73.30	-13.00	-60.30	Н
672.1400	-77.74	3.07	6.34	-74.47	-13.00	-61.47	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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 Pervices Inc.
 Reference No: T140415W02-RP2

 IC ID: 5131A-LE910NA
 Report No.: T150528W04-RP2

**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-60.27	0.79	-5.83	-66.89	-13.00	-53.89	V
138.6400	-62.01	1.39	-0.38	-63.78	-13.00	-50.78	V
171.6200	-70.41	1.57	2.69	-69.29	-13.00	-56.29	V
342.3400	-81.41	2.18	5.8	-77.79	-13.00	-64.79	V
448.0700	-80.19	2.58	5.74	-77.03	-13.00	-64.03	V
529.5500	-80.68	2.75	6	-77.43	-13.00	-64.43	V
78.5000	-57.63	1.03	-0.43	-59.09	-13.00	-46.09	Н
138.6400	-57.61	1.39	-0.38	-59.38	-13.00	-46.38	Н
191.9900	-75.33	1.62	3.79	-73.16	-13.00	-60.16	Н
342.3400	-74	2.18	5.8	-70.38	-13.00	-57.38	Н
379.2000	-76.92	2.31	5.98	-73.25	-13.00	-60.25	Н
499.4800	-77.47	2.7	5.89	-74.28	-13.00	-61.28	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-59.92	0.79	-5.83	-66.54	-13.00	-53.54	V
138.6400	-61.92	1.39	-0.38	-63.69	-13.00	-50.69	V
319.0600	-84.14	2.17	5.71	-80.60	-13.00	-67.60	V
448.0700	-80.07	2.58	5.74	-76.91	-13.00	-63.91	V
516.9400	-81.21	2.7	6.07	-77.84	-13.00	-64.84	V
619.7600	-82.74	2.94	6.11	-79.57	-13.00	-66.57	V
78.5000	-56.82	1.03	-0.43	-58.28	-13.00	-45.28	Н
153.1900	-64.68	1.44	0.94	-65.18	-13.00	-52.18	Н
342.3400	-74.6	2.18	5.8	-70.98	-13.00	-57.98	Н
516.9400	-78.27	2.7	6.07	-74.90	-13.00	-61.90	Н
619.7600	-76.98	2.94	6.11	-73.81	-13.00	-60.81	Н
922.4000	-73.81	3.58	6.55	-70.84	-13.00	-57.84	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / QPSK

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
138.6400	-62	1.39	-0.38	-63.77	-13.00	-50.77	V
171.6200	-75.97	1.57	2.69	-74.85	-13.00	-61.85	V
342.3400	-81.9	2.18	5.8	-78.28	-13.00	-65.28	V
349.1300	-82.54	2.22	5.8	-78.96	-13.00	-65.96	V
508.2100	-84.14	2.69	5.98	-80.85	-13.00	-67.85	V
637.2200	-82.17	3	6.15	-79.02	-13.00	-66.02	V
191.9900	-79.34	1.62	3.79	-77.17	-13.00	-64.17	Н
261.8300	-82.75	1.92	5.51	-79.16	-13.00	-66.16	Н
342.3400	-76.83	2.18	5.8	-73.21	-13.00	-60.21	Н
459.7100	-80.22	2.6	5.88	-76.94	-13.00	-63.94	Н
566.4100	-79.8	2.86	6.06	-76.60	-13.00	-63.60	Н
625.5800	-79.59	2.96	6.16	-76.39	-13.00	-63.39	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-64.08	1.16	-0.64	-65.88	-13.00	-52.88	V
138.6400	-61.84	1.39	-0.38	-63.61	-13.00	-50.61	V
171.6200	-71.75	1.57	2.69	-70.63	-13.00	-57.63	V
330.7000	-80.6	2.16	5.71	-77.05	-13.00	-64.05	V
448.0700	-79.97	2.58	5.74	-76.81	-13.00	-63.81	V
516.9400	-80.77	2.7	6.07	-77.40	-13.00	-64.40	V
71.7100	-70.03	0.97	-1.61	-72.61	-13.00	-59.61	Н
138.6400	-57.9	1.39	-0.38	-59.67	-13.00	-46.67	Н
153.1900	-65.81	1.44	0.94	-66.31	-13.00	-53.31	Н
342.3400	-76.87	2.18	5.8	-73.25	-13.00	-60.25	Н
382.1100	-79.73	2.31	5.99	-76.05	-13.00	-63.05	Н
565.4400	-79.67	2.86	6.04	-76.49	-13.00	-63.49	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-63.36	0.79	-5.83	-69.98	-13.00	-56.98	V
138.6400	-61.62	1.39	-0.38	-63.39	-13.00	-50.39	V
171.6200	-75.01	1.57	2.69	-73.89	-13.00	-60.89	V
342.3400	-80.24	2.18	5.8	-76.62	-13.00	-63.62	V
448.0700	-82.64	2.58	5.74	-79.48	-13.00	-66.48	V
649.8300	-81	3.03	6.28	-77.75	-13.00	-64.75	V
71.7100	-70.34	0.97	-1.61	-72.92	-13.00	-59.92	Н
138.6400	-57.88	1.39	-0.38	-59.65	-13.00	-46.65	Н
342.3400	-76.99	2.18	5.8	-73.37	-13.00	-60.37	Н
390.8400	-79.84	2.32	6	-76.16	-13.00	-63.16	Н
544.1000	-80.07	2.79	6.23	-76.63	-13.00	-63.63	Н
625.5800	-78.11	2.96	6.16	-74.91	-13.00	-61.91	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-63.74	1.16	-0.64	-65.54	-13.00	-52.54	V
138.6400	-61.86	1.39	-0.38	-63.63	-13.00	-50.63	V
171.6200	-71.73	1.57	2.69	-70.61	-13.00	-57.61	V
222.0600	-83.23	1.77	5.34	-79.66	-13.00	-66.66	V
346.2200	-80.57	2.21	5.8	-76.98	-13.00	-63.98	V
448.0700	-80.72	2.58	5.74	-77.56	-13.00	-64.56	V
78.5000	-57.66	1.03	-0.43	-59.12	-13.00	-46.12	Н
138.6400	-57.32	1.39	-0.38	-59.09	-13.00	-46.09	Н
180.3500	-73.42	1.61	3.62	-71.41	-13.00	-58.41	Н
342.3400	-74.35	2.18	5.8	-70.73	-13.00	-57.73	Н
516.9400	-77.23	2.7	6.07	-73.86	-13.00	-60.86	Н
669.2300	-76.77	3.07	6.3	-73.54	-13.00	-60.54	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-59.9	0.79	-5.83	-66.52	-13.00	-53.52	V
138.6400	-61.89	1.39	-0.38	-63.66	-13.00	-50.66	V
171.6200	-70.59	1.57	2.69	-69.47	-13.00	-56.47	V
222.0600	-83.03	1.77	5.34	-79.46	-13.00	-66.46	V
342.3400	-81.73	2.18	5.8	-78.11	-13.00	-65.11	V
448.0700	-80.68	2.58	5.74	-77.52	-13.00	-64.52	V
78.5000	-57.47	1.03	-0.43	-58.93	-13.00	-45.93	Н
138.6400	-57.23	1.39	-0.38	-59.00	-13.00	-46.00	Н
171.6200	-68.62	1.57	2.69	-67.50	-13.00	-54.50	Н
234.6700	-80.79	1.8	5.38	-77.21	-13.00	-64.21	Н
342.3400	-73.96	2.18	5.8	-70.34	-13.00	-57.34	Н
499.4800	-77.96	2.7	5.89	-74.77	-13.00	-61.77	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-64.07	1.16	-0.64	-65.87	-13.00	-52.87	V
138.6400	-62.18	1.39	-0.38	-63.95	-13.00	-50.95	V
171.6200	-71.91	1.57	2.69	-70.79	-13.00	-57.79	V
349.1300	-82.78	2.22	5.8	-79.20	-13.00	-66.20	V
448.0700	-80.06	2.58	5.74	-76.90	-13.00	-63.90	V
516.9400	-81.17	2.7	6.07	-77.80	-13.00	-64.80	V
78.5000	-57.4	1.03	-0.43	-58.86	-13.00	-45.86	Н
138.6400	-57.62	1.39	-0.38	-59.39	-13.00	-46.39	Н
171.6200	-68.42	1.57	2.69	-67.30	-13.00	-54.30	Н
222.0600	-78.12	1.77	5.34	-74.55	-13.00	-61.55	Н
342.3400	-73.68	2.18	5.8	-70.06	-13.00	-57.06	Н
499.4800	-76.87	2.7	5.89	-73.68	-13.00	-60.68	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 5MHz / QPSK

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-68.53	1.16	-0.64	-70.33	-13.00	-57.33	V
138.6400	-65.14	1.39	-0.38	-66.91	-13.00	-53.91	V
342.3400	-81.44	2.18	5.8	-77.82	-13.00	-64.82	V
450.9800	-84.21	2.59	5.74	-81.06	-13.00	-68.06	V
552.8300	-82.52	2.82	6.14	-79.20	-13.00	-66.20	V
733.2500	-80.56	3.19	6.31	-77.44	-13.00	-64.44	V
120 (100	50.45	1.20	0.20		12.00	40.24	
138.6400	-59.47	1.39	-0.38	-61.24	-13.00	-48.24	Н
342.3400	-80.35	2.18	5.8	-76.73	-13.00	-63.73	Н
420.9100	-82.1	2.46	5.8	-78.76	-13.00	-65.76	Н
554.7700	-81.13	2.82	6.11	-77.84	-13.00	-64.84	Н
679.9000	-79.65	3.09	6.5	-76.24	-13.00	-63.24	Н
745.8600	-75.48	3.2	6.1	-72.58	-13.00	-59.58	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
222.0600	-82.61	1.77	5.34	-79.04	-13.00	-66.04	V
346.2200	-81.89	2.21	5.8	-78.30	-13.00	-65.30	V
450.9800	-80.06	2.59	5.74	-76.91	-13.00	-63.91	V
529.5500	-81.01	2.75	6	-77.76	-13.00	-64.76	V
733.2500	-78.99	3.19	6.31	-75.87	-13.00	-62.87	V
883.6000	-79.06	3.48	6.7	-75.84	-13.00	-62.84	V
79.5000	57.02	1.02	0.42	50.29	12.00	16.29	Н
78.5000	-57.92	1.03	-0.43	-59.38	-13.00	-46.38	П
138.6400	-59.36	1.39	-0.38	-61.13	-13.00	-48.13	Н
288.9900	-79.66	2.02	5.39	-76.29	-13.00	-63.29	Н
415.0900	-77.24	2.45	5.86	-73.83	-13.00	-60.83	Н
529.5500	-77.5	2.75	6	-74.25	-13.00	-61.25	Н
733.2500	-72.57	3.19	6.31	-69.45	-13.00	-56.45	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the ackground noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-63.83	1.16	-0.64	-65.63	-13.00	-52.63	V
345.2500	-80.8	2.2	5.8	-77.20	-13.00	-64.20	V
529.5500	-80.94	2.75	6	-77.69	-13.00	-64.69	V
618.7900	-81.73	2.94	6.12	-78.55	-13.00	-65.55	V
745.8600	-78.49	3.2	6.1	-75.59	-13.00	-62.59	V
859.3500	-79.1	3.43	6.4	-76.13	-13.00	-63.13	V
48.4300	-53.08	0.79	-5.83	-59.70	-13.00	-46.70	Н
138.6400	-58.41	1.39	-0.38	-60.18	-13.00	-47.18	Н
171.6200	-69.89	1.57	2.69	-68.77	-13.00	-55.77	Н
342.3400	-74.92	2.18	5.8	-71.30	-13.00	-58.30	Н
601.3300	-77.78	2.91	6.39	-74.30	-13.00	-61.30	Н
769.1400	-75.71	3.27	6.39	-72.59	-13.00	-59.59	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 5MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-64.04	1.16	-0.64	-65.84	-13.00	-52.84	V
138.6400	-64.58	1.39	-0.38	-66.35	-13.00	-53.35	V
346.2200	-80.99	2.21	5.8	-77.40	-13.00	-64.40	V
529.5500	-81.38	2.75	6	-78.13	-13.00	-65.13	V
673.1100	-79.98	3.08	6.36	-76.70	-13.00	-63.70	V
781.7500	-77.79	3.31	6.13	-74.97	-13.00	-61.97	V
48.4300	-51.98	0.79	-5.83	-58.60	-13.00	-45.60	Н
78.5000	-57.49	1.03	-0.43	-58.95	-13.00	-45.95	Н
138.6400	-58.5	1.39	-0.38	-60.27	-13.00	-47.27	Н
342.3400	-74.65	2.18	5.8	-71.03	-13.00	-58.03	Н
601.3300	-77.46	2.91	6.39	-73.98	-13.00	-60.98	Н
745.8600	-73.03	3.2	6.1	-70.13	-13.00	-57.13	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-63.16	1.16	-0.64	-64.96	-13.00	-51.96	V
138.6400	-64.95	1.39	-0.38	-66.72	-13.00	-53.72	V
219.1500	-86.37	1.76	5.32	-82.81	-13.00	-69.81	V
346.2200	-81.89	2.21	5.8	-78.30	-13.00	-65.30	V
450.9800	-80.06	2.59	5.74	-76.91	-13.00	-63.91	V
781.7500	-78.2	3.31	6.13	-75.38	-13.00	-62.38	V
48.4300	-51.53	0.79	-5.83	-58.15	-13.00	-45.15	Н
78.5000	-59.33	1.03	-0.43	-60.79	-13.00	-47.79	Н
138.6400	-59.36	1.39	-0.38	-61.13	-13.00	-48.13	Н
342.3400	-75.59	2.18	5.8	-71.97	-13.00	-58.97	Н
516.9400	-78.83	2.7	6.07	-75.46	-13.00	-62.46	Н
733.2500	-72.57	3.19	6.31	-69.45	-13.00	-56.45	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the ackground noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
138.6400	-65.05	1.39	-0.38	-66.82	-13.00	-53.82	V
171.6200	-71.94	1.57	2.69	-70.82	-13.00	-57.82	V
342.3400	-81.7	2.18	5.8	-78.08	-13.00	-65.08	V
448.0700	-81.61	2.58	5.74	-78.45	-13.00	-65.45	V
529.5500	-80.94	2.75	6	-77.69	-13.00	-64.69	V
733.2500	-79.38	3.19	6.31	-76.26	-13.00	-63.26	V
48.4300	-54.03	0.79	-5.83	-60.65	-13.00	-47.65	Н
138.6400	-59.05	1.39	-0.38	-60.82	-13.00	-47.82	Н
171.6200	-66.79	1.57	2.69	-65.67	-13.00	-52.67	Н
342.3400	-74.42	2.18	5.8	-70.80	-13.00	-57.80	Н
589.6900	-78.4	2.89	6.19	-75.10	-13.00	-62.10	Н
733.2500	-74.17	3.19	6.31	-71.05	-13.00	-58.05	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 10MHz / QPSK

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-64.81	1.16	-0.64	-66.61	-13.00	-53.61	V
171.6200	-71.87	1.57	2.69	-70.75	-13.00	-57.75	V
366.5900	-81.95	2.29	5.77	-78.47	-13.00	-65.47	V
448.0700	-80.33	2.58	5.74	-77.17	-13.00	-64.17	V
529.5500	-81.1	2.75	6	-77.85	-13.00	-64.85	V
733.2500	-79.47	3.19	6.31	-76.35	-13.00	-63.35	V
48.4300	-59.18	0.79	-5.83	-65.80	-13.00	-52.80	Н
138.6400	-58.67	1.39	-0.38	-60.44	-13.00	-47.44	Н
240.4900	-82.47	1.81	5.34	-78.94	-13.00	-65.94	Н
406.3600	-79.1	2.43	5.94	-75.59	-13.00	-62.59	Н
621.7000	-79.94	2.95	6.13	-76.76	-13.00	-63.76	Н
863.2300	-77.23	3.43	6.44	-74.22	-13.00	-61.22	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-63.72	1.16	-0.64	-65.52	-13.00	-52.52	V
138.6400	-65.45	1.39	-0.38	-67.22	-13.00	-54.22	V
171.6200	-73.49	1.57	2.69	-72.37	-13.00	-59.37	V
345.2500	-81.25	2.2	5.8	-77.65	-13.00	-64.65	V
448.0700	-79.1	2.58	5.74	-75.94	-13.00	-62.94	V
516.9400	-81.16	2.7	6.07	-77.79	-13.00	-64.79	V
48.4300	-51.94	0.79	-5.83	-58.56	-13.00	-45.56	Н
78.5000	-61.07	1.03	-0.43	-62.53	-13.00	-49.53	Н
138.6400	-59.37	1.39	-0.38	-61.14	-13.00	-48.14	Н
342.3400	-74.74	2.18	5.8	-71.12	-13.00	-58.12	Н
469.4100	-77.88	2.62	5.79	-74.71	-13.00	-61.71	Н
769.1400	-75.86	3.27	6.39	-72.74	-13.00	-59.74	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-66.61	1.16	-0.64	-68.41	-13.00	-55.41	V
138.6400	-65.48	1.39	-0.38	-67.25	-13.00	-54.25	V
333.6100	-84.19	2.16	5.74	-80.61	-13.00	-67.61	V
439.3400	-84.85	2.53	5.9	-81.48	-13.00	-68.48	V
769.1400	-80.17	3.27	6.39	-77.05	-13.00	-64.05	V
883.6000	-78.87	3.48	6.7	-75.65	-13.00	-62.65	V
78.5000	-59.33	1.03	-0.43	-60.79	-13.00	-47.79	Н
138.6400	-58.89	1.39	-0.38	-60.66	-13.00	-47.66	Н
342.3400	-73.49	2.18	5.8	-69.87	-13.00	-56.87	Н
621.7000	-78.09	2.95	6.13	-74.91	-13.00	-61.91	Н
733.2500	-74.63	3.19	6.31	-71.51	-13.00	-58.51	Н
853.5300	-76.29	3.41	6.4	-73.30	-13.00	-60.30	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 10MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-64.21	1.16	-0.64	-66.01	-13.00	-53.01	V
138.6400	-65.33	1.39	-0.38	-67.10	-13.00	-54.10	V
330.7000	-84.75	2.16	5.71	-81.20	-13.00	-68.20	V
439.3400	-80.94	2.53	5.9	-77.57	-13.00	-64.57	V
529.5500	-81.31	2.75	6	-78.06	-13.00	-65.06	V
733.2500	-79.06	3.19	6.31	-75.94	-13.00	-62.94	V
48.4300	-51.69	0.79	-5.83	-58.31	-13.00	-45.31	Н
138.6400	-59.02	1.39	-0.38	-60.79	-13.00	-47.79	Н
342.3400	-75.31	2.18	5.8	-71.69	-13.00	-58.69	Н
516.9400	-77.5	2.7	6.07	-74.13	-13.00	-61.13	Н
618.7900	-78.69	2.94	6.12	-75.51	-13.00	-62.51	Н
733.2500	-73.28	3.19	6.31	-70.16	-13.00	-57.16	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**CERVICES INC.**Reference No: T140415W02-RP2
IC ID: 5131A-LE910NA
Report No.: T150528W04-RP2

**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-64.64	1.16	-0.64	-66.44	-13.00	-53.44	V
171.6200	-73.49	1.57	2.69	-72.37	-13.00	-59.37	V
342.3400	-81.37	2.18	5.8	-77.75	-13.00	-64.75	V
448.0700	-80.65	2.58	5.74	-77.49	-13.00	-64.49	V
637.2200	-83.05	3	6.15	-79.90	-13.00	-66.90	V
793.3900	-79.16	3.33	6.33	-76.16	-13.00	-63.16	V
78.5000	-58.57	1.03	-0.43	-60.03	-13.00	-47.03	Н
138.6400	-58.07	1.39	-0.38	-59.84	-13.00	-46.84	Н
342.3400	-75.02	2.18	5.8	-71.40	-13.00	-58.40	Н
516.9400	-78.85	2.7	6.07	-75.48	-13.00	-62.48	Н
612.9700	-77.88	2.94	6.23	-74.59	-13.00	-61.59	Н
733.2500	-74.19	3.19	6.31	-71.07	-13.00	-58.07	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-63.26	1.16	-0.64	-65.06	-13.00	-52.06	V
138.6400	-65.44	1.39	-0.38	-67.21	-13.00	-54.21	V
342.3400	-81.88	2.18	5.8	-78.26	-13.00	-65.26	V
366.5900	-81.78	2.29	5.77	-78.30	-13.00	-65.30	V
529.5500	-81.01	2.75	6	-77.76	-13.00	-64.76	V
733.2500	-78.55	3.19	6.31	-75.43	-13.00	-62.43	V
48.4300	-52.01	0.79	-5.83	-58.63	-13.00	-45.63	Н
78.5000	-57.68	1.03	-0.43	-59.14	-13.00	-46.14	Н
138.6400	-59.18	1.39	-0.38	-60.95	-13.00	-47.95	Н
342.3400	-75.94	2.18	5.8	-72.32	-13.00	-59.32	Н
499.4800	-78.54	2.7	5.89	-75.35	-13.00	-62.35	Н
745.8600	-73.25	3.2	6.1	-70.35	-13.00	-57.35	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 20MHz / QPSK

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-65.12	1.16	-0.64	-66.92	-13.00	-53.92	V
171.6200	-72.27	1.57	2.69	-71.15	-13.00	-58.15	V
342.3400	-80.82	2.18	5.8	-77.20	-13.00	-64.20	V
435.4600	-82.53	2.51	5.86	-79.18	-13.00	-66.18	V
529.5500	-80.58	2.75	6	-77.33	-13.00	-64.33	V
733.2500	-81.33	3.19	6.31	-78.21	-13.00	-65.21	V
78.5000	-58.59	1.03	-0.43	-60.05	-13.00	-47.05	Н
138.6400	-58.61	1.39	-0.38	-60.38	-13.00	-47.38	Н
342.3400	-76.05	2.18	5.8	-72.43	-13.00	-59.43	Н
499.4800	-76.68	2.7	5.89	-73.49	-13.00	-60.49	Н
745.8600	-72.91	3.2	6.1	-70.01	-13.00	-57.01	Н
793.3900	-76.1	3.33	6.33	-73.10	-13.00	-60.10	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-67.3	0.79	-5.83	-73.92	-13.00	-60.92	V
101.7800	-65.71	1.16	-0.64	-67.51	-13.00	-54.51	V
171.6200	-71.89	1.57	2.69	-70.77	-13.00	-57.77	V
222.0600	-83.41	1.77	5.34	-79.84	-13.00	-66.84	V
342.3400	-81.95	2.18	5.8	-78.33	-13.00	-65.33	V
516.9400	-82.11	2.7	6.07	-78.74	-13.00	-65.74	V
78.5000	-58.5	1.03	-0.43	-59.96	-13.00	-46.96	Н
138.6400	-59.12	1.39	-0.38	-60.89	-13.00	-47.89	Н
342.3400	-74.55	2.18	5.8	-70.93	-13.00	-57.93	Н
379.2000	-77.17	2.31	5.98	-73.50	-13.00	-60.50	Н
529.5500	-78.74	2.75	6	-75.49	-13.00	-62.49	Н
745.8600	-73.66	3.2	6.1	-70.76	-13.00	-57.76	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
78.5000	-69.11	1.03	-0.43	-70.57	-13.00	-57.57	V
101.7800	-63.87	1.16	-0.64	-65.67	-13.00	-52.67	V
171.6200	-73.54	1.57	2.69	-72.42	-13.00	-59.42	V
346.2200	-81.67	2.21	5.8	-78.08	-13.00	-65.08	V
448.0700	-79.77	2.58	5.74	-76.61	-13.00	-63.61	V
619.7600	-82.07	2.94	6.11	-78.90	-13.00	-65.90	V
150 2000	62.45	1.42	0.71	64.10	12.00	<b>71.10</b>	11
150.2800	-63.47	1.43	0.71	-64.19	-13.00	-51.19	Н
174.5300	-72.77	1.59	3	-71.36	-13.00	-58.36	Н
342.3400	-75.09	2.18	5.8	-71.47	-13.00	-58.47	Н
469.4100	-78.3	2.62	5.79	-75.13	-13.00	-62.13	Н
733.2500	-77.06	3.19	6.31	-73.94	-13.00	-60.94	Н
864.2000	-76.39	3.44	6.45	-73.38	-13.00	-60.38	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 20MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-66.73	1.16	-0.64	-68.53	-13.00	-55.53	V
138.6400	-65.51	1.39	-0.38	-67.28	-13.00	-54.28	V
349.1300	-80.58	2.22	5.8	-77.00	-13.00	-64.00	V
459.7100	-82.87	2.6	5.88	-79.59	-13.00	-66.59	V
529.5500	-81.95	2.75	6	-78.70	-13.00	-65.70	V
793.3900	-80.33	3.33	6.33	-77.33	-13.00	-64.33	V
48.4300	-51.67	0.79	-5.83	-58.29	-13.00	-45.29	Н
138.6400	-58.2	1.39	-0.38	-59.97	-13.00	-46.97	Н
342.3400	-73.92	2.18	5.8	-70.30	-13.00	-57.30	Н
469.4100	-77.51	2.62	5.79	-74.34	-13.00	-61.34	Н
649.8300	-78.24	3.03	6.28	-74.99	-13.00	-61.99	Н
883.6000	-76.67	3.48	6.7	-73.45	-13.00	-60.45	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
101.7800	-63.04	1.16	-0.64	-64.84	-13.00	-51.84	V
138.6400	-65.2	1.39	-0.38	-66.97	-13.00	-53.97	V
345.2500	-81.09	2.2	5.8	-77.49	-13.00	-64.49	V
448.0700	-79.74	2.58	5.74	-76.58	-13.00	-63.58	V
529.5500	-82.56	2.75	6	-79.31	-13.00	-66.31	V
721.6100	-79.22	3.17	6.49	-75.90	-13.00	-62.90	V
48.4300	-52.12	0.79	-5.83	-58.74	-13.00	-45.74	Н
138.6400	-59.08	1.39	-0.38	-60.85	-13.00	-47.85	Н
342.3400	-75.66	2.18	5.8	-72.04	-13.00	-59.04	Н
499.4800	-76.76	2.7	5.89	-73.57	-13.00	-60.57	Н
601.3300	-78.47	2.91	6.39	-74.99	-13.00	-61.99	Н
769.1400	-74.39	3.27	6.39	-71.27	-13.00	-58.27	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-68.64	1.07	0.39	-69.32	-13.00	-56.32	V
138.6400	-65.34	1.39	-0.38	-67.11	-13.00	-54.11	V
342.3400	-82.68	2.18	5.8	-79.06	-13.00	-66.06	V
448.0700	-81.88	2.58	5.74	-78.72	-13.00	-65.72	V
733.2500	-80.11	3.19	6.31	-76.99	-13.00	-63.99	V
883.6000	-79.08	3.48	6.7	-75.86	-13.00	-62.86	V
78.5000	-58.95	1.03	-0.43	-60.41	-13.00	-47.41	Н
138.6400	-58.53	1.39	-0.38	-60.30	-13.00	-47.30	Н
171.6200	-67.12	1.57	2.69	-66.00	-13.00	-53.00	Н
342.3400	-74.32	2.18	5.8	-70.70	-13.00	-57.70	Н
601.3300	-78.13	2.91	6.39	-74.65	-13.00	-61.65	Н
733.2500	-74.81	3.19	6.31	-71.69	-13.00	-58.69	Н

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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#### Reference No: T140415W02-RP2 FCC ID: RI7LE910NA IC ID: 5131A-LE910NA Report No.: T150528W04-RP2

### **Above 1GHz**

# LTE Band 17 / CHANNEL BANDWIDTH: 5MHz / QPSK

Tx / Low channel May 31, 2015 **Operation Mode: Test Date:** 

26°C David Shu **Temperature: Tested by:** 

60% RH Ver. / Hor. **Humidity: Polarity:** 

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3891.000	-55.68	8.38	9.29	-54.77	-13.00	-41.77	V
4927.000	-54.39	9.3	10.48	-53.21	-13.00	-40.21	V
N/A							
3611.000	-55.92	8.12	9.01	-55.03	-13.00	-42.03	Н
4423.000	-53.61	8.7	9.74	-52.57	-13.00	-39.57	Н
N/A							

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
4332.000	-55.59	8.61	9.67	-54.53	-13.00	-41.53	V
7027.000	-50.41	11.62	11.94	-50.09	-13.00	-37.09	V
N/A							
3555.000	-56.03	8	8.96	-55.07	-13.00	-42.07	Н
4353.000	-53.76	8.62	9.68	-52.70	-13.00	-39.70	Н
N/A							

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
5109.000	-56.28	9.46	10.64	-55.10	-13.00	-42.10	V
6691.000	-52.45	11.29	11.53	-52.21	-13.00	-39.21	V
N/A							
2078.000	-59.44	5.77	5.51	-59.70	-13.00	-46.70	Н
4976.000	-55.42	9.37	10.56	-54.23	-13.00	-41.23	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 17 / CHANNEL BANDWIDTH: 5MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1966.000	-57.29	5.63	5.46	-57.46	-13.00	-44.46	V
3702.000	-55.57	8.2	9.1	-54.67	-13.00	-41.67	V
N/A							
4773.000	-53.98	9.27	10.24	-53.01	-13.00	-40.01	Н
7391.000	-46.08	12.09	12.53	-45.64	-13.00	-32.64	Н
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
4241.000	-54.89	8.54	9.59	-53.84	-13.00	-40.84	V
7440.000	-46.23	12.16	12.6	-45.79	-13.00	-32.79	V
N/A							
5067.000	-54.54	9.44	10.63	-53.35	-13.00	-40.35	Н
6656.000	-51.28	11.27	11.49	-51.06	-13.00	-38.06	Н
N/A							

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
4605.000	-55.51	9.13	9.97	-54.67	-13.00	-41.67	V
7349.000	-47.59	12.06	12.46	-47.19	-13.00	-34.19	V
N/A							
4185.000	-54.77	8.49	9.55	-53.71	-13.00	-40.71	Н
4696.000	-53.98	9.13	10.11	-53.00	-13.00	-40.00	Н
N/A							

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / QPSK

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3723.000	-56.08	8.21	9.12	-55.17	-13.00	-42.17	V
4507.000	-54.05	8.93	9.81	-53.17	-13.00	-40.17	V
N/A							
6978.000	-50.11	11.54	11.87	-49.78	-13.00	-36.78	Н
7293.000	-46.59	12.03	12.37	-46.25	-13.00	-33.25	Н
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
4766.000	-55.47	9.26	10.23	-54.50	-13.00	-41.50	V
7300.000	-48.27	12.04	12.38	-47.93	-13.00	-34.93	V
N/A							
4311.000	-54.36	8.6	9.65	-53.31	-13.00	-40.31	Н
5081.000	-54.97	9.44	10.63	-53.78	-13.00	-40.78	Н
N/A							
	·						
	·						

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1966.000	-47.6	5.63	5.46	-47.77	-13.00	-34.77	V
4066.000	-54.3	8.42	9.45	-53.27	-13.00	-40.27	V
N/A							
4381.000	-55.27	8.63	9.7	-54.20	-13.00	-41.20	Н
6971.000	-49.16	11.54	11.87	-48.83	-13.00	-35.83	Н
N/A							

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1966.000	-55.71	5.63	5.46	-55.88	-13.00	-42.88	V
3821.000	-55.24	8.29	9.22	-54.31	-13.00	-41.31	V
N/A							
3898.000	-54.59	8.39	9.3	-53.68	-13.00	-40.68	Н
4514.000	-54.21	8.94	9.82	-53.33	-13.00	-40.33	Н
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1966.000	-56.64	5.63	5.46	-56.81	-13.00	-43.81	V
3912.000	-55.02	8.39	9.31	-54.10	-13.00	-41.10	V
N/A							
1959.000	-54.05	5.61	5.47	-54.19	-13.00	-41.19	Н
3821.000	-53.91	8.29	9.22	-52.98	-13.00	-39.98	Н
N/A							

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1966.000	-52.03	5.63	5.46	-52.20	-13.00	-39.20	V
4500.000	-54.61	8.91	9.8	-53.72	-13.00	-40.72	V
N/A							
3905.000	-54.05	8.39	9.31	-53.13	-13.00	-40.13	Н
4500.000	-53.85	8.91	9.8	-52.96	-13.00	-39.96	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 5MHz / QPSK

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3422.000	-48.43	7.64	8.67	-47.40	-13.00	-34.40	V
6852.000	-47.37	11.42	11.72	-47.07	-13.00	-34.07	V
N/A							
3429.000	-54.76	7.66	8.69	-53.73	-13.00	-40.73	Н
4521.000	-52.39	8.96	9.83	-51.52	-13.00	-38.52	Н
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3464.000	-52.16	7.76	8.79	-51.13	-13.00	-38.13	V
4794.000	-55.33	9.31	10.27	-54.37	-13.00	-41.37	V
N/A							
3870.000	-55.22	8.35	9.27	-54.30	-13.00	-41.30	Н
4262.000	-54.32	8.56	9.61	-53.27	-13.00	-40.27	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3506.000	-50.72	7.88	8.91	-49.69	-13.00	-36.69	V
4493.000	-54.76	8.89	9.79	-53.86	-13.00	-40.86	V
N/A							
3506.000	-53.57	7.88	8.91	-52.54	-13.00	-39.54	Н
7377.000	-44.3	12.08	12.5	-43.88	-13.00	-30.88	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 5MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3429.000	-49.55	7.66	8.69	-48.52	-13.00	-35.52	V
6852.000	-45.93	11.42	11.72	-45.63	-13.00	-32.63	V
N/A							
3422.000	-54	7.64	8.67	-52.97	-13.00	-39.97	Н
7405.000	-45.75	12.1	12.55	-45.30	-13.00	-32.30	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3464.000	-53.97	7.76	8.79	-52.94	-13.00	-39.94	V
6824.000	-50.44	11.36	11.69	-50.11	-13.00	-37.11	V
N/A							
3338.000	-56.05	7.5	8.41	-55.14	-13.00	-42.14	Н
5074.000	-53.86	9.44	10.63	-52.67	-13.00	-39.67	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3506.000	-50.87	7.88	8.91	-49.84	-13.00	-36.84	V
7013.000	-48.19	11.58	11.92	-47.85	-13.00	-34.85	V
N/A							
5284.000	-53.34	9.64	10.71	-52.27	-13.00	-39.27	Н
7377.000	-44.3	12.08	12.5	-43.88	-13.00	-30.88	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 10MHz / QPSK

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3429.000	-50.41	7.66	8.69	-49.38	-13.00	-36.38	V
6859.000	-46.67	11.44	11.73	-46.38	-13.00	-33.38	V
N/A							
4507.000	-53.62	8.93	9.81	-52.74	-13.00	-39.74	Н
7377.000	-45.8	12.08	12.5	-45.38	-13.00	-32.38	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Reference No: T140415W02-RP2

Report No.: T150528W04-RP2

**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3464.000	-52.33	7.76	8.79	-51.30	-13.00	-38.30	V
6859.000	-48.96	11.44	11.73	-48.67	-13.00	-35.67	V
N/A							
4500.000	-54.01	8.91	9.8	-53.12	-13.00	-40.12	Н
5508.000	-53.9	9.96	10.8	-53.06	-13.00	-40.06	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3506.000	-50.78	7.88	8.91	-49.75	-13.00	-36.75	V
7398.000	-46	12.09	12.54	-45.55	-13.00	-32.55	V
N/A							
2799.000	-57.06	6.81	6.88	-56.99	-13.00	-43.99	Н
3884.000	-53.43	8.37	9.28	-52.52	-13.00	-39.52	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 10MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2169.000	-57.41	5.9	5.64	-57.67	-13.00	-44.67	V
3429.000	-52.51	7.66	8.69	-51.48	-13.00	-38.48	V
N/A							
3821.000	-53.8	8.29	9.22	-52.87	-13.00	-39.87	Н
4507.000	-53.93	8.93	9.81	-53.05	-13.00	-40.05	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3464.000	-53.26	7.76	8.79	-52.23	-13.00	-39.23	V
5067.000	-54.15	9.44	10.63	-52.96	-13.00	-39.96	V
N/A							
3744.000	-53.79	8.23	9.14	-52.88	-13.00	-39.88	Н
4521.000	-53.2	8.96	9.83	-52.33	-13.00	-39.33	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3499.000	-49.56	7.87	8.9	-48.53	-13.00	-35.53	V
6978.000	-48.01	11.54	11.87	-47.68	-13.00	-34.68	V
N/A							
3233.000	-56.54	7.33	8.1	-55.77	-13.00	-42.77	Н
3926.000	-53.81	8.38	9.33	-52.86	-13.00	-39.86	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 20MHz / QPSK

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3436.000	-52.79	7.68	8.71	-51.76	-13.00	-38.76	V
7363.000	-46.05	12.07	12.48	-45.64	-13.00	-32.64	V
N/A							
3436.000	-51.95	7.68	8.71	-50.92	-13.00	-37.92	Н
6894.000	-48.14	11.52	11.77	-47.89	-13.00	-34.89	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3457.000	-54.17	7.74	8.77	-53.14	-13.00	-40.14	V
4941.000	-54.52	9.32	10.51	-53.33	-13.00	-40.33	V
N/A							
3366.000	-55.58	7.53	8.5	-54.61	-13.00	-41.61	Н
7286.000	-46.36	12.01	12.36	-46.01	-13.00	-33.01	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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26°C

**Tested by:** 

Reference No: T140415W02-RP2

David Shu

Report No.: T150528W04-RP2

**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3457.000	-53.23	7.74	8.77	-52.20	-13.00	-39.20	V
N/A							
4808.000	-53.16	9.32	10.29	-52.19	-13.00	-39.19	Н
7384.000	-46.08	12.08	12.51	-45.65	-13.00	-32.65	Н
N/A							

# Remark:

**Temperature:** 

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 4 / CHANNEL BANDWIDTH: 20MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3884.000	-55.11	8.37	9.28	-54.20	-13.00	-41.20	V
6859.000	-48.92	11.44	11.73	-48.63	-13.00	-35.63	V
N/A							
3436.000	-51.95	7.68	8.71	-50.92	-13.00	-37.92	Н
4458.000	-54.48	8.8	9.77	-53.51	-13.00	-40.51	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3457.000	-54.17	7.74	8.77	-53.14	-13.00	-40.14	V
4472.000	-54.26	8.83	9.78	-53.31	-13.00	-40.31	V
N/A							
3366.000	-55.58	7.53	8.5	-54.61	-13.00	-41.61	Н
7328.000	-46.23	12.05	12.42	-45.86	-13.00	-32.86	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 31, 2015

**Temperature:** 26°C **Tested by:** David Shu

**Humidity:** 60% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3457.000	-53.23	7.74	8.77	-52.20	-13.00	-39.20	V
4367.000	-54.43	8.63	9.69	-53.37	-13.00	-40.37	V
N/A							
4808.000	-53.16	9.32	10.29	-52.19	-13.00	-39.19	Н
7048.000	-48.29	11.68	11.98	-47.99	-13.00	-34.99	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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